

The logo is a circular emblem with a red border. Inside, there is a stylized landscape with mountains, a river, and trees. The text "TSEKHENE" is on the left and "PEOPLE OF THE ROCKS" is on the right, both following the curve of the circle.

# **McLeod Lake Indian Band**

## **Environmental Management Framework**

### **Maintaining Environmental Stewardship**

**March 2007**  
**Version 1.0**



## **PREFACE**

This Environmental Management Framework reflects the vision of the McLeod Lake Indian Band and the relationship that they maintain with their environment. The intention is to use the Framework as a tool to ensure that activities and developments on the McLeod Lake Indian Band's lands occur in a manner that minimizes environmental impact and degradation. More importantly, it represents a proactive approach to environmental management by defining best management practices for specific activities on reserve land rather than responding to problems as they arise.

### ***McLeod Lake Indian Band Vision Statement, April 10 2001***

*"We, the Tse'Khene Nation (People of the Rock), are proud people. We believe the Creator put us here as stewards of the land. We will regain our Traditions to cultivate a respected, united, self-sufficient community. We recognize all people as equal regardless of name and ancestry. Our governing body is elected based upon integrity, honour, accountability and transparency to all members. Together we will provide healthy, educated, self-sufficient and prosperous lifestyles for our future generations"*



## EXECUTIVE SUMMARY

The McLeod Lake Indian Band (MLIB) has approximately 18,765 hectares of reserve lands, the majority of which are concentrated around McLeod Lake and along the Highway 97 corridor, north of the city of Prince George. This Environmental Management Framework has been developed under the sponsorship of Indian and Northern Affairs Canada (INAC) and endorsed by the MLIB as part of a strategy to assist Land Code Bands in realizing the management of their Band lands.

The purpose of the MLIB Environmental Management Framework is to ensure that environmental impacts on MLIB lands are prevented or minimised to the greatest extent possible and that environmental considerations are identified and fully incorporated into the decision-making process. This Environmental Management Framework plays an important role in the attainment of a future Environmental Management Agreement between the MLIB and the federal government.

This overview document begins by describing in a broad sense the background for environmental stewardship and the environmental history of the MLIB. It also describes the current environmental issues on MLIB lands.

Essential elements of this Environmental Management Framework are the component management plans and their associated Environmental Operating Procedures (EOP) that were developed to address specific environmental issues for the MLIB. The component plans and their relevant section numbers are as follows:

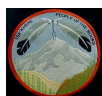
Section Number	Component Plan
1.0	Fuel Handling and Storage
2.0	Solid and Liquid Waste Management
3.0	Hazardous Materials Handling, Storage and Disposal
4.0	Environmental Emergency Response
5.0	Environmental Impact Assessment
6.0	Ground and Surface Water Protection
7.0	Habitat Protection
8.0	Cultural Ressources Protection



The component management plans are intended to be stand-alone documents. They are comprised of the following elements for each environmental issue:

- an Introduction;
- MLIB goals;
- targets and performance indicators;
- existing regulatory regime (federal, provincial, and regional);
- organizational and administrative procedures;
- future recommendations;
- standards, guidelines, and best management practices in the form of Environmental Operating Procedures;
- a glossary; and
- additional information in appendices.

The MLIB Land Management Manager, Land Management Committee, and the Land Management Committee Administrative Assistant will oversee the implementation of this Environmental Management Framework. In the future, they will also be tasked with the development of monitoring procedures and subsequently with handling compliance issues regarding this Framework. The Administrative Assistant to the Land Management Committee will be responsible for communicating with Band members, tracking incidents, reporting as necessary, and posting the most current version of the Environmental Management Framework, EOPs, and other vital environmental information as necessary.



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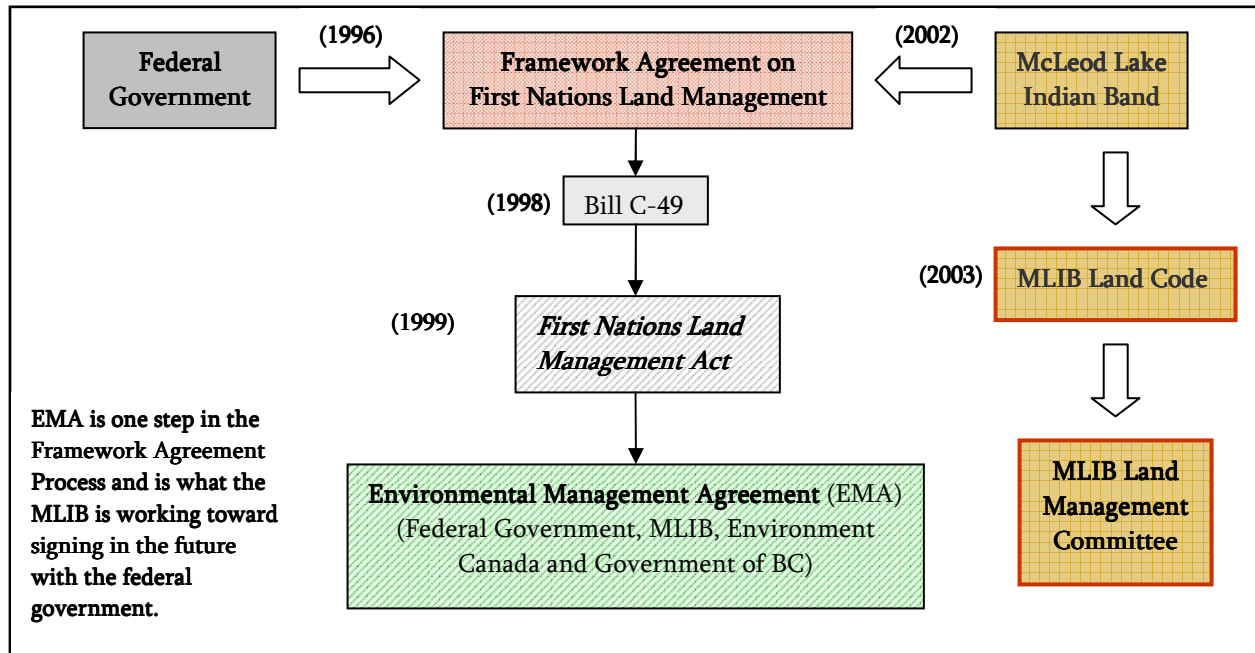
## 1.0 BACKGROUND

The Government of Canada entered into a Framework Agreement on First Nations Land Management (“FNLMA” or “Framework Agreement”) with 13 First Nations on February 12, 1996. A 14<sup>th</sup> First Nation joined the initiative in December of 1997. The Framework Agreement provided these First Nations with the option to remove their reserve lands from the land management provisions of the *Indian Act* in order to have control over their lands and resources and importantly to improve their capacities and opportunities for economic development.

The Framework Agreement sets out the principal components of this new land management process. It is not a treaty or land claims agreement within the meaning of s. 35 of the *Constitution Act, 1982* and does not affect treaty or other constitutional rights of the First Nations involved. The federal legislative framework for the agreement was introduced as Bill C-49, the *First Nations Land Management Act*, and was passed by the federal Parliament in 1999. Once a First Nation meets the requirements set out in the *First Nations Land Management Act* and the Framework Agreement, they have the authority to enter into other agreements, including an Environmental Management Agreement (EMA)<sup>1</sup>. The EMA will be negotiated between the First Nation, the Department of Indian Affairs, Environment Canada and the provincial government (if it chooses to participate), and will set out how the First Nation will enact, administer and enforce essential environmental protection laws. The Minister of Indian Affairs and Northern Development will no longer be involved in the management of the First Nation's reserve lands for a First Nation that falls under the governing structure of the Framework Agreement, and an EMA (Figure 1).

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<sup>1</sup> The Environmental Management Agreement provisions are in Part 5 of the Framework Agreement, clauses 24.1 - 24.8.



**Figure 1:** Schematic of the timeframe and legislation involved in the Framework Agreement on First Nations Land Management for the McLeod Lake Indian Band.

For First Nations who have joined the Framework Agreement initiative, the option to resume control over their reserve land can only occur with the consent of their individual communities through a ratification process which was built into the Framework Agreement. Currently, not all of the original 14 First Nations have enacted Land Codes, but other First Nations have joined the initiative. The specific steps to achieve the land management goal are set out in the Framework Agreement and include the following elements:

1. *A Land Code (Section 5)*
2. *An Individual Agreement (Section 6)*
3. *A Community Ratification Process (Section 7)*
4. *Federal Legislation*
5. *Verification (Section 8)*
6. *Transfer of Land Management*
7. *Lands Advisory Board (Section 38-41)*

### ***The Land Code***

First Nations pursuing FNLMA status are required to create and adopt a Land Code. The Land Code must be ratified by the community and becomes the fundamental land law of the First Nation, replacing the management provisions of the *Indian Act*. The Land Code does not have to be approved by the Minister. The Framework Agreement sets forth the obligatory contents for the Land Code as follows:





- identify the reserve lands to be managed by the First Nation (called "First Nation land"),
- present the general rules and procedures for the use and occupation of these reserve lands by First Nation members and others,
- provide financial accountability for revenues from the reserve lands (except oil and gas revenues, which continue under federal law),
- provide the procedures for making and publishing First Nation land laws,
- provide conflict of interest rules,
- provide a community ratification process to develop rules and procedures applicable to land on the breakdown of a marriage,
- identify a dispute resolution process,
- set out procedures by which the First Nation can grant interests in land or acquire lands for community purposes,
- allow for the delegation of land management responsibilities, and
- set out the procedure for amending the Land Code.

### ***An Individual Agreement***

An Individual Agreement between each First Nation community and the Minister will be negotiated in order to deal with such matters as:

- the reserve lands to be managed by the First Nation,
- the specifics of the transfer of the administration of land from Canada to the First Nation, and
- the developmental and operational funding to be provided by Canada to the First Nation for land management.

### ***A Community Ratification Process***

In order for the First Nation to assume control over its lands, the Land Code, and the Individual Agreement, must be ratified by the adult members of the First Nation. All members of the First Nation who are at least 18 years of age, whether living on or off the reserve have the right to vote on these documents. The community ratification process was devised to ensure that the entire First Nation membership would participate in the process and enables them to make knowledgeable community-based decisions.

### ***Federal Legislation***

The Framework Agreement on First Nations Land Management was ratified through enactment of consistent federal legislation, originally through Bill C-49 and subsequently through the *First Nations Land Management Act*.

### ***Verification***

An independent person selected jointly by the First Nation and Canada, called a verifier, confirms that the community ratification process and Land Code are consistent with the



Framework Agreement. The verifier monitors the community ratification process to ensure that the rules are adhered to.

### ***Transfer of Land Management***

If and when the community ratifies the Land Code and Individual Agreement, the control over First Nation reserve land and resources is transferred from under the *Indian Act* to the newly established First Nation's land laws and administration.

### ***Land Management Committee***

Under the Framework Agreement, the First Nation has the option to establish a Land Management Committee in accordance with its Land Code. The Land Management Committee will assist its First Nation in implementing a land management regime, including the development of model land codes, laws, documents, agreements and management systems.

## **1.1 McLeod Lake Indian Band Environmental Management History**

The McLeod Lake Indian Band joined the Framework Agreement initiative on November 5, 2002, as illustrated by Figure 1, to transfer the management of their reserve lands and resources from the government of Canada to the MLIB.

Pursuant to the Framework Agreement on First Nation Land Management, the MLIB Community ratified its Land Code on January 29, 2003 and it was subsequently verified on February 27, 2003 (Figure 1). Also set out in its Land Code is the formation of the MLIB Land Management Committee, and its roles and responsibilities with regards to First Nation land (Band land) management.

### **1.1.1 Phase I Environmental Site Assessment**

The government of Canada is required to complete Phase 1 Environmental Site Assessments (ESA) prior to issuing a land instrument involving First Nation lands and prior to the granting of reserve status to non-reserve lands. A Phase 1 ESA is used to identify actual and potential site contamination, and involves the evaluation and reporting of existing information collected through records review, site visits and interviews. The following sections are brief summaries of full reports created for each step of the ESA (Public Works and Government Service Canada 2002; Morrow 2004; Morrow 2006).



In 2002, the Department of Indian Affairs and Northern Development (DIAND) and the MLIB engaged Environmental Services, Public Works and Government Services Canada to conduct Phase I ESA's on the following lands:

- |                     |                      |
|---------------------|----------------------|
| 1. McLeod Lake IR1, | 4. War Lake IR4, and |
| 2. Pack River IR2,  | 5. McLeod Lake IR5.  |
| 3. Carp Lake IR3,   |                      |

As part of the Treaty 8 adhesion process, an additional 14 parcels of land were added to the McLeod Lake Indian Band's reserve lands in 2002; Phase 1 ESAs were completed for each parcel.

Observations were made in respect to the following environmental issues:

- |                                            |                                        |
|--------------------------------------------|----------------------------------------|
| 1. water management,                       | 4. non-hazardous wastes and materials, |
| 2. petroleum storage tanks and containers, | 5. polychlorinated biphenyls (PCBs),   |
| 3. hazardous wastes and materials,         | 6. asbestos, and                       |
|                                            | 7. pesticides.                         |

Of the above environmental issues, analysis identified the need for remedial action and recommendations were made for three environmental issues specific to IR1:

1. Petroleum storage tanks and containers,
2. Hazardous wastes and materials, and
3. Non-hazardous wastes and materials.

The following observations were made on IR1:

**1. *Petroleum storage tanks and containers***

i. Prior to 1998, the McLeod Lake Indian Band owned and operated a general store that sold diesel fuel and unleaded gasoline. At the time of inspection, the gasoline dispensing hardware and underground fuel storage tank (5000 gallons) were still in place. It was recommended that all hardware be removed and the adjacent soil tested for gasoline residuals.

ii. In 1995, a relatively large diesel spill occurred from an old single walled, gravity fed 4500 litre aboveground fuel storage tank. The diesel-contaminated soil was excavated by the Band, stockpiled, and then moved to an area north of the ballpark. At the time of the inspection, the soil remained in this location. A Phase 2 evaluation of the soil was recommended to ascertain potential contaminants and their levels.

iii. An existing 10,000 litre double walled, aboveground pump-fed diesel fuel storage tank and dispensing pump which had been in use between 1995 and 1998 was no longer in service. However, a small patch of fuel stained soil was present around the contaminant pan. It was surmised that poor dispensing practices, combined with overflow from the contaminant pan were the most likely cause of the stained soil. Recommendations included a Phase 2 evaluation of



the soil around the pump and a clean up of the soil and contaminant pan. Should this system be restored, it was recommended that it be covered with an open-framed roof structure, and that the tank be registered as per CEPA requirements.

iv. Residential use of a single-walled aboveground storage tank for heating oil. Decommissioning of this system was recommended if possible. If decommissioning is not feasible, the tank should be painted, placed in a contaminant pan and inspected on a regular basis for signs of leakage.

## **2. *Hazardous wastes and materials***

An observation was made regarding a small group of derelict vehicles and debris in the northeast section of the reserve. As it is unlikely that temporary storage such as this cannot be avoided, Band members were advised to ensure that all fluids, batteries and tires were removed prior to storage. The area should be inspected regularly and a removal service contracted when the number of derelict vehicles warrants pick-up.

## **3. *Non-hazardous wastes and materials***

An observation was made that household garbage used to be discarded in a small ravine behind the houses when the main reserve was on the West shore of the Lake. The majority of the debris was likely biodegradable typical household waste, however, the community water source is within 300 metres of the end of the ravine, making it a prudent action to remove any remaining debris.

### **1.1.2 Phase II Environmental Site Assessment**

A follow-up Phase II ESA was conducted by Morrow Environmental Consultants Inc. on both McLeod Lake IR1 and IR5. The purpose of the Phase II ESA was to further investigate the areas of potential environmental concern identified during Phase I. The following tasks were completed during this phase:

1. the old 5000 US gallon (22,750 litre) belowground fuel storage tank was excavated and its ancillary piping and pump island were disassembled;
2. test pits were completed to ascertain the soil conditions at the aboveground diesel storage tank and dispensing pump;
3. test pits were also completed to analyse and characterize the soil conditions at the former stockpile – which has since been spread over a small area;
4. soil samples were collected from the test pits and excavation site for field screening and laboratory analysis of potential contaminants of concern; and



5. an abandoned above ground storage tank, two empty drums and two pails (20 L) of waste oil from IR5 were removed and disposed of appropriately off-site.

### **1.1.3 Remedial Excavations**

Two remedial excavations at IR1 were completed by Morrow Environmental Consultants Inc.: 1. The former diesel spilled stockpile area, and 2. The aboveground diesel storage tank and dispenser. The excavations were carried out to remove contaminated soils previously identified in Phase II ESAs. Given the current land use, no further work or intrusive investigations are warranted at either site

In October of 2006, the site where vehicles were being stored was cleaned-up by a local contractor and Morrow Environmental was contracted to conduct surface soil sampling at the cleanup area. At this time, minor amounts of contaminants were found, and the site will require follow-up remediation in the form of shallow soil excavations. Site visits and remediation activities are scheduled for the summer of 2007.

### **1.1.4 Environmental Management Framework Development**

After the completion of the ESAs and remedial activities, the next step in the Framework Agreement process for the MLIB was the development of an Environmental Management Framework that would address the environmental concerns found on their reserve lands as well as any additional environmental issues identified by Band members or the federal government.

In the late fall of 2006, Timberline Natural Resource Group (Timberline) was contracted by the MLIB Lands and Resource Manager, Adele Chingee, to assist with the development of an overarching Environmental Management Framework and appropriate component management plans (EOPs) for the environmental issues that were identified through the ESA process; these issues are addressed fully in Section 5.0 below.

Draft Terms of Reference were provided to Timberline by the Department of Indian and Northern Affairs Canada (INAC). The Terms of Reference outlined the objectives for the ensuing Environmental Management Framework and provided broad procedural recommendations for the assignment. This overview document and its component management plans and EOPs are the result.



It is hoped that this Environmental Management Framework will provide part of the foundation for a future Environmental Management Agreement between the MLIB and Canada. While the EOPs are directed at addressing best management practices on MLIB reserve lands, it is also recognized that by acting in environmentally responsible way, the MLIB is contributing to global welfare.

## 1.2 Purpose

Preserving the quantity and quality of existing First Nation lands is a fundamental principle of the Framework Agreement. Consistent with the Framework Agreement, the purpose of this Environmental Management Framework is to ensure that negative environmental impacts on the MLIB's reserve lands are prevented or minimised to the extent possible and that environmental considerations are identified and fully incorporated into the decision-making process. This Environmental Management Framework is an important step towards the attainment of a future Environmental Management Agreement between the MLIB and the federal government.

Specific objectives for the Environmental Management Framework are as follows:

- to promote the principle of sustainable development for reserve lands so that development takes place in a manner that preserves and protects ecologically and culturally significant areas;
- to ensure that environmental considerations are incorporated into decisions regarding activities and projects that may affect reserve lands;
- to ensure that requirements of the applicable environmental regulatory regime and operating standards, guidelines and best management practices are met or exceeded by the MLIB land laws, as provided under their Land Code;
- to ensure that reserve lands are managed in an environmentally sound manner, including the protection of ecologically and culturally significant areas;
- to provide for the implementation of the principle of "no net loss" of the productive capacity of the environment;
- to assist in identifying organizational and administrative procedures and requirements (including resources, training and information/data management) for implementing environmental practices and procedures outlined in the Environmental Management Framework; and
- to increase the overall awareness of residents and workers regarding environmental issues and practices on their reserve lands.



## 2.0 OVERARCHING ENVIRONMENTAL MANAGEMENT GOALS

The MLIB Land Management Committee's mission statement is as follows:

“To develop policies and guidelines and create and implement laws for the management of McLeod Lake Indian Band lands and resources to ensure and enhance the long-term sustainability of these resources for the future of the Tse'Khene” (MLIB Land Use Plan 2004 pg 95).”

Current tangible environmental goals for the MLIB include:

- Goal 1:** Effectively implement the MLIB Environmental Management Framework and its EOPs.
- Goal 2:** Engage the Band and community in environmental management so that members take responsibility for actions that negatively impact their environment, and help develop feasible targets and indicators for the environmental issues on their reserve lands.
- Goal 3:** Raise awareness amongst Band and community members to proactively improve upon the level of knowledge regarding environmental issues.

## 3.0 RESERVE LANDS AND ENVIRONMENTAL RESOURCE DESCRIPTION

The MLIB has approximately 18,765 hectares of reserve lands, the majority of which are concentrated around McLeod Lake along the Highway 97 corridor, north of the city of Prince George.

The MLIB land base includes one biogeoclimatic zone and two associated subzones.

The climate of the Sub-Boreal Spruce (SBS) biogeoclimatic zone can be generally described as being continental, with characteristic seasonal extremes in temperatures. Summers are relatively short, but warm and typically moist. Winters are snowy and can be severe with extended periods of time where temperatures are below -10°C, with temperature extremes that reach -40°C or colder. In summer, thunderstorms frequently pass over, creating a fire hazard which is somewhat moderated by the moist climate. Annual precipitation is described as moderate and ranges between 415 and 1650 mm, of which approximately 25% of total precipitation is in the form of snowfall.



Climax tree species for the SBS biogeoclimatic zone include hybrid white spruce (*Picea engelmannii* x *glauca*) and subalpine fir (*Abies lasiocarpa*). Early seral species, those that occupy an area immediately following a disturbance (such as wildfire), include lodgepole pine (*Pinus contorta* var. *latifolia*), paper birch (*Betula papyrifera*), and trembling aspen (*Populus tremuloides*). Douglas-fir (*Pseudotsuga menziesii*) is also common and usually more abundant on dry, warm, rich sites. Forests of black cottonwood (*Populus trichocarpa*) with minor amounts of spruce occur occasionally on the active floodplains of the Fraser and Nechako Rivers.

The following SBS subzones and variants are found within the boundaries of the reserve lands:

- SBSmk1 (moist cool Mossvale variant)
- SBSwk1 (wet cool Willow variant)

The terrain closest to the MLIB reserve lands is typically gently rolling, and due to the proximity to water in most cases plant and wildlife species are quite diverse.

### 3.1 Resource Values

According to First Nations' oral history, the traditional territory of the MLIB has been occupied by humans since time immemorial (Mackenzie LRMP 2000 pg vi). Archaeological evidence confirms that people have inhabited the area for thousands of years. Resource values and their importance to the MLIB are well defined in the Land Use Plan (2004). Below is a brief summary of those values.

#### 3.1.1 Timber

Timber values are high in the traditional territory due to large volumes of mature timber in predominantly winter operating areas, close to Mackenzie milling facilities.

The Sub-Boreal Spruce Biogeoclimatic zone is considered to have relatively good to very good productivity. The slightly dry to "fresh" sites have a moderate capability for growing spruce and lodgepole pine, the moderately dry sites have a low capability for lodgepole pine growth, and the moist sites have a high capacity for growing spruce and subalpine fir.

The McLeod Lake area has a history of logging that dates back to the 1960's, (Mackenzie LRMP 2001). The MLIB has actively participated in the logging industry since 1985, through its logging company, Duz Cho Logging. Of late, the MLIB has been granted a joint community forest license with the District of Mackenzie.





### **3.1.2 Wildlife and Wildlife Habitat**

Wildlife habitat and occurrences throughout the traditional territory are moderate to high; there is a long history of guide outfitting and trapping throughout the traditional area, and these continue to be viable activities. The known occurrences of red- and blue-listed and regionally significant species include the American bittern, surf scoter, grizzly bear, fisher, wolverine, northern goshawk, wolf, moose, caribou, and mule deer.

As identified in the MLIB Land Use Plan, moose, bear, wolf, mule deer, caribou, beaver, and other furbearing species play a culturally significant role in the lives of the MLIB.

### **3.1.3 Fish**

Fish values in the vicinity of Band lands and the traditional territory are considered moderate, except high in the Parsnip and Pack Rivers. Red- and blue-listed fish species include Artic grayling and bull trout. Numerous lakes support healthy rainbow trout populations. Specific species of importance to the MLIB are rainbow and bull trout as well as several whitefish species.

### **3.1.4 Plants**

Botanical and food source plant values in the traditional territory are considered high. The types of plants important to the MLIB are extensive, and listed in Section 6.3 of this document.

### **3.1.5 Recreation**

Recreation values are moderate to high. The traditional territory is well known for activities such as boating, off-road driving, skiing, hiking, hunting, fishing and snowmobiling.

## **4.0 LAND USE PLANNING**

### **4.1 McLeod Lake Indian Band Land Code**

As stated previously, under the First Nations Framework Agreement on Land Management initiative, the MLIB developed a Land Code that sets out the basic rules for their new land regime. Now that the Land Code and the Individual Agreement have been adopted by MLIB, the land administration provisions of the *Indian Act* no longer apply to the MLIB.



With the Land Code and Individual Agreement in effect, the MLIB now has the ability to create modern tools of governance over their reserve lands and resources, specifically with respect to<sup>2</sup>:

- passing laws (in areas such as the environment );
  - enabling the MLIB to develop environmental assessment and protection regimes; and
  - providing the MLIB with a wide range of land related law-making powers and ensuring proper enforcement mechanisms are available;
- enforcing the laws that they create for their reserve lands;
- establishing intergovernmental relationships with provincial and municipal governments; and withdrawing the opportunity for provincial or municipal governments to expropriate reserve land through the expropriation provisions in s. 35 of the *Indian Act*; and limiting federal expropriation powers; and
- allowing the MLIB to receive, retain and manage monetary revenues flowing from reserve land transactions.

Federal laws continue to apply, however, in the event of an inconsistency or conflict, the *First Nations Land Management Act* will prevail. For greater certainty, the *First Nations Land Management Act* specifically mentions that the following federal laws continue to apply:

- the *Emergencies Act* continues to apply, but appropriations must be authorized by an order of the Governor in Council;
- federal laws that relate to environmental protection prevail to the extent of inconsistency over the MLIB law or a MLIB land code;
- for health and safety reasons, the *Atomic Energy Control Act* and its successor legislation continue to apply, but expropriations are subject to the restrictions of the *First Nations Land Management Act*;
- the *Indian Oil and Gas Act* continues to apply; and
- the *Expropriation Act* continues to apply, but in the event of conflict the *First Nations Land Management Act* prevails.

## 4.2 The McLeod Lake Indian Band Land Use Plan

The MLIB Land Use Plan categorizes their reserve land base into specific land use designations, thus guiding the types of development that may occur in any given unit. Important land use recommendations made under this plan include:

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<sup>2</sup> <http://www.firstbusiness.ca/workshops/index.htm> - accessed January 26, 2007



- the adoption of a general environmental screening process by the Land Management Committee to ensure the protection of the land and its resources;
- the determination of permissible forms of tenure for MLIB reserve lands and where these tenures fit with land use designations;
- the creation of a development review policy to outline the process for proposed development from inception to completion;
- the development of specific zoning and bylaws over the current broad ones; and
- the completion of a Traditional Use Study to document and inventory traditional use sites.

### **4.3 The McLeod Lake Indian Band Forest Practices Code**

The MLIB has and enforces its own Forest Practices Code (2003 version 8.2). This Forest Practices Code was developed to ensure that all forest practices on MLIB's reserve lands are carried out in accordance with sustainable forest use, for the benefit of all present and future Band members. The MLIB's Forest Practices Code addresses the following areas of forest management: planning, protection of forest resources, roads, harvesting practices, silviculture, riparian widths, fire use, wildfire prevention and wildfire control, cutting permits, investigations and enforcement, penalties, administrative matters, annual reporting and annual audits, stumpage, cutting permit application, timber marking policy and site plans.

Part 7 (Forest Resources) of the MLIB Land Code (section 29, 29.1 and 29.2) states the following with regards to forest practices on Band reserve land.

“Forest practices on Band land will be regulated in accordance with Article 6 of the McLeod Lake Indian Band Treaty No. 8 Adhesion and Settlement Agreement.”

“For greater certainty, the Band will conduct forest practices on Band Land in accordance with:

- the McLeod Lake Indian Band Forest Practices Code;
- the McLeod Lake Indian Band forest development plans;
- the principles of sustainable development; and
- any applicable legislative requirements.”



## **5.0 ENVIRONMENTAL ISSUES ON FNLMA LANDS**

### **5.1 Framework Issues**

Under the FNLM ESA process and in accordance with accepted environmental management practices, the following key environmental management issues were identified as requiring the adoption of best management practices for the MLIB's reserve lands:

1. Liquid and Solid Waste
2. Fuel Handling and Storage
3. Hazardous Materials Handling, Storage and Disposal
4. Environmental Emergency Response
5. Environmental Impact Assessment

Indian and Northern Affairs Canada require that regardless of any other environmental issue identified on MLIB's reserve lands, the above five environmental issues must be addressed in the MLIB's Environmental Management Framework. Component management plans and EOPs were first developed for these five environmental issues.

### **5.2 Environmental Site Assessments**

As discussed previously in Sections 1.1.1, 1.1.2, and 1.1.3, observations requiring remedial action were identified in three areas:

1. Petroleum storage tanks and containers
2. Hazardous wastes and materials, and
3. Non-hazardous wastes and materials.

These concerns are encompassed by the environmental issues identified in Section 5.1 directly above and therefore did not require additional component plans and EOPs.

### **5.3 Community Input**

Preliminary input from the Land Management Committee identified derelict vehicles, proper handling and storage of fuel cans (jerry cans) and the use of pesticides on Band lands as key areas of concern. These concerns are encompassed within the five environmental issues identified by INAC.



Community meetings were held on March 19<sup>th</sup> and 20<sup>th</sup>, 2007 in McLeod Lake and Prince George respectively. The purpose of the community meetings was to inform the Band members of the progress that was being made in the Framework Agreement initiative and toward an Environmental Management Agreement. The meetings were also intended to obtain new and relevant information from Band members that should be included in the development of the overarching Environmental Management Framework and, more importantly, the EOPs.

Invitations were sent out 21 days in advance of the meetings. Invitation packages included an invitation letter, a background document (outlining the process and the proposed EOPs), a survey (designed for feedback and input), and a quiz (intended to test Band members' knowledge and provide incentive to complete the survey). Those individuals who returned their surveys and quizzes were entered into a draw for the chance to win gift certificates.

Both meetings were attended and input was successfully obtained from Band members. Band members in general were glad to see the direction that the framework was taking, and provided recommendations for additional environmental issues. Some recommendations were well within the scope of the issues identified in Section 5.1 above others however were not. These lead to the addition of 3 more component plans and EOPs.

As a direct result of the community meetings, component management plans for the following areas were added to the Environmental Management Framework:

1. Ground and Surface Water Protection;
2. Habitat Protection; and
3. Cultural Resources Protection.

These environmental issues form sections 6.0, 7.0 and 8.0 of this Environmental Management Framework.

### **5.3.1 Survey Results**

Two hundred and eighty surveys (Appendix 2) were sent to MLIB Band members on February 21, 2007. The intent of the survey was to obtain input from Band members regarding the development of the Environmental Management Framework and to determine which environmental issues were of significant importance to individual Band members so that in the development of the Environmental Management Framework, Band members' concerns that are within the scope of the framework could be addressed.

Forty surveys were returned. The results of the survey are located in Appendix 2.



## 5.4 Concerns Identified in the Land Use Plan

The following outlines areas of concern related to environmental management on reserve lands that have been identified in the MLIB Land Use Plan.

1. **Riparian** (lakes and streams) **and wetland habitat** areas were identified as sensitive wildlife habitats due to high use and biological values. They were also identified for their aesthetic and recreation values.
2. **Wildlife species** identified as having cultural significance, sustenance or commercial value, and/or are uncommon or rare on the landscape include:
  - Moose (*Alces alces*) (relatively abundant)
  - Bear (*Ursus* spp.)
  - Wolf (*Canis* spp.)
  - Mule deer (*Odocoileus hemionus*) (relatively scarce)
  - Caribou (*Rangifer tarandus*) (relatively scarce)
  - Beaver (*Castor* spp.) (relatively abundant)
3. No provincially or federally identified “species at risk” are directly dependent on MLIB reserve lands. However, **6 species listed with the Conservation** Data Center are known or likely to inhabit lands within the MLIB’s traditional territory:
  - American Bittern (*Botaurus lentiginosus*)
  - Trumpeter Swan (*Cygnus buccinator*)
  - Sandhill Crane (*Grus canadensis*)
  - Wolverine (*Gulo gulo*)
  - Grizzly Bear (*Ursus horribilis*)
  - Fisher (*Martes pennanti*)
4. Rainbow trout (*Oncorhynchus mykiss*) and bull trout (*Salvenius confluentus*) (blue-listed), in particular, are **fish species** of management concern. Both species are commonly fished in the lakes of the traditional territory. Bull trout is particularly sensitive to water temperature and to development activities that directly or indirectly affect fish migration, sediment levels, hydrological regimes and habitat complexity.
5. **Traditional plants** and their uses are also identified in the MLIB Land Use Plan. Plant species include:
  - Balsam fir (*Abies lasiocarpa*)
  - Black huckleberry (*Vaccinium membranaceum*)
  - Black twinberry (*Lonicera involucrata*)
  - Devil’s club (*Oplopanax horridus*)
  - Engelmann spruce (*Picea engelmannii*)
  - Gooseberry (*Ribes lacustre*)
  - High-bush cranberry (*Viburnum edule*)
  - Mountain ash (*Sorbus* spp.)
  - Muskeg tea (*Ledum groenlandicum*)



- Pyramid spirea (*Spirea pyramidata*)
- Red-osier dogwood (*Cornus stolonifera*)
- Saskatoon (*Amelanchier alnifolia*)
- Soapberry (*Shepherdia canadensis*)
- Thimbleberry (*Rubus parviflorus*)
- Wild raspberry (*Rubus idaeus*)
- Wild rose (*Rosa accicularis*)

## 6.0 ORGANIZATION AND ADMINISTRATIVE PROCEDURES

### 6.1 Environmental Management Framework Structure

The MLIB's Environmental Management Framework currently consists of this overview document and eight component management plans. The component management plans include the following environmental management issues and their accompanying EOPs.

#### 1.0 Fuel Handling and Storage

- EOP – MLIB-1-001 Small containers  $\leq$  230 Litres
- EOP – MLIB-1-002 Small TDG Tanks  $\leq$  454 Litres (truck box tanks or tidy tanks)
- EOP – MLIB-1-003 Large TDG Tanks  $>$  454 Litres (tank vehicles)
- EOP – MLIB-1-004 Fixed Location Aboveground Storage Tanks (AST)  $>$  230 Litres
- EOP – MLIB-1-005 Spill Response

#### 2.0 Solid and Liquid Waste Management

- EOP – MLIB-2-001 Solid Waste
- EOP – MLIB-2-002 Liquid Waste

#### 3.0 Hazardous Materials Handling, Storage and Disposal

- EOP – MLIB-3-001 Household Hazardous Material
- EOP – MLIB-3-002 Alternatives to Pesticides
- EOP – MLIB-3-003 Proper use of Pesticides

#### 4.0 Environmental Emergency Response

- EOP – MLIB-4-001 Spills
- EOP – MLIB-4-002 Fire
- EOP – MLIB-4-003 Natural Catastrophe

#### 5.0 Environmental Impact Assessment

- EOP-MLIB-5-001 MLIB Administered Environmental Assessment Process

#### 6.0 Ground and Surface Water Protection

- EOP – MLIB-6-001 – Water Resource Protection

#### 7.0 Habitat Protection

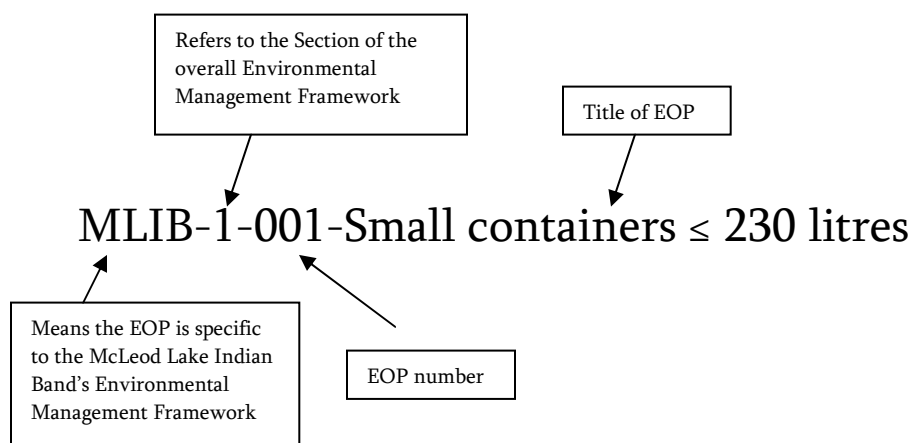
- EOP-MLIB-7-001 Habitat Protection



## 8.0 Cultural Resources Protection

### ▪ EOP-MLIB-8-001 MLIB Administered Cultural Resources Assessment Process

Each EOP was created as an individual component of the overall Environmental Management Framework with an identifying EOP number, and revision number for continuous tracking, monitoring and improvement purposes. For example, Fuel Handling and Storage is component 1.0 of the overall Environmental Management Framework; the EOPs are then numbered sequentially - 1-001, 1-002, 1-003 etc, - where more than one EOP is part of the component plan (Figure 1). The use of MLIB for each EOP ensures the user that the EOP they are reviewing or using belongs to the McLeod Lake Indian Band's Environmental Management Framework. In this manner, EOPs can be added and/or removed from the overall framework over time.



**Figure 2:** Explanation of the EOP numbering system used for the MLIB's component management plans.

## 6.1 Land Management Committee Structure

As described previously, the Land Management Committee (Figure 3) was formed under the MLIB Land Code. The Land Management Committee serves as an advisory board to the Land Manager and the Band Council with regard to land management, including environmental issues, on MLIB reserve lands. In the future, as the MLIB continues to implement the Land Code, Chief and Council may choose to increase the Land Management Committee's responsibilities. Through a Band Council Resolution Chief and Council can delegate the Land Management Committee the authority to enforce environmental laws and carry out procedures under the Environmental Management Framework and its component management plans. Until this authority is granted however, the Land Management Committee will continue to work with the Lands and Resource Manager and Chief and Council to provide recommendations on land use and environmental related decisions.

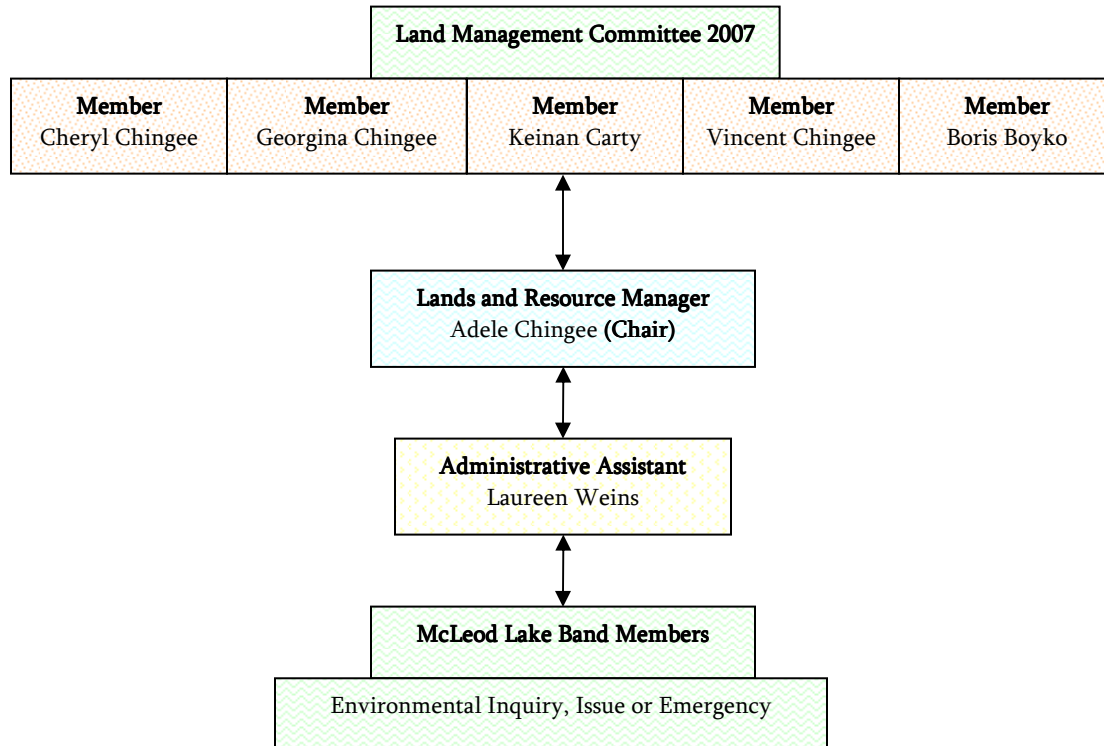




The MLIB Lands and Resource Manager, Adele Chingee, the Land Management Committee, and the Administrative Assistant, Laureen Weins, will oversee the implementation and help monitor compliance with this Environmental Management Framework and its associated EOPs. Jointly, these individuals will also ensure that policies, practices, and procedures regarding this Environmental Management Framework are maintained in a manner that is accessible to all Band members. Effective ways for achieving this goal include:

1. maintaining current records and copies of the Environmental Management Framework and component plans at the Band Office in McLeod Lake;
2. uploading the Environmental Management Framework and component plans to our MLIB internet site;
3. mailing out copies of our Environmental Management Framework and component plans to Band members who live off reserve and do not have access to the internet, and
4. notifying Band members when EOPs or any other component of the Environmental Management Framework is updated.

Reporting of environmental matters will be done to Laureen Weins, Adele Chingee or to individual Land Management Committee members. The following organizational chart (Figure 3) has been developed to display the reporting process. Whenever a Band member would like to make an inquiry about land management and environmental stewardship, report an incident, or discuss an environmental issue, they should attempt to make their request to the Administrative Assistant first who may be able to assist immediately, or follow up with the appropriate information after consulting the appropriate professional authority. In the event that Laureen is temporarily unavailable, messages can be relayed through the Band office to one of the other Land Management Committee members.



**Figure 3:** Organizational Schematic for the current Land Management Committee (2007) and reporting hierarchy.<sup>3</sup>

Messages for the Lands and Resource Manager and/or the Land Management Committee can be left with the Land Management Committee's Administrative Assistant:

1. phone: (250) 750-6860,
2. email: lweins@milib.ca, or
3. mail: General Delivery McLeod lake, B.C. V0J 2G0.

The Band office general telephone number is (250) 750-4415.

## 7.0 RECOMMENDED NEXT STEPS

Critical to the success of this Environmental Management Framework will be its implementation and subsequent compliance and enforcement. Adequate human and financial resources will be necessary to assist with implementation and monitoring of this Environmental Management Framework and its component EOPs. The federal government has made provisions for adequate resources in the Framework Agreement; stated in clause 27.1. A logical next step would be to

<sup>3</sup> This Environmental Management Framework is a working document. As the Land Management Committee members change, the organizational chart and text in this document will need to be amended accordingly.



develop a work plan and budget for the MLIB to determine what resources would be necessary to implement this Environmental Management Framework.

Appropriate and effective monitoring and reporting procedures as well as tracking mechanisms will need attention. Additionally, a comprehensive approach to implementing and maintaining appropriate, up-to-date EOPs is necessary. The Lands and Resource Manager and the Land Management Committee may require a Band Council Resolution in order to have the authority to proceed with enforcing the best management practices and legal obligations provided for in this Environmental Management Framework.

The current Environmental Management Framework deals with the environmental issues outlined in Section 6.0 above. There are, however, areas that may warrant the creation of additional component management plans and associated EOPs and these will surely be identified in time as the MLIB endorses and implements the framework.

## **8.0 GLOSSARY**

A glossary of definitions and terms common to the language of Environmental Management and relevant to this Environmental Management Framework and the First Nation Framework Agreement on Land Management are provided in the following Appendix (Appendix 1).





## APPENDIX 1 – GLOSSARY OF DEFINITIONS AND TERMS

### **Aboriginal Title**

A legal term that recognizes the interest of Aboriginal Peoples on the land. It is based on their long-term standing use and occupancy of the land as descendants of the original inhabitants of Canada.

### **Community Approval Process**

Under the *First Nations Land Management Act*, each community must create its own process that will result in the adoption of a land code and its individual agreements with the minister. For the MLIB this process included a series of meetings and ratification votes. The regulations for these meetings and votes are listed in the MLIB Land code in sections 12 through 14.

### **Contaminated Site**

The Contaminated Sites Management Working Group defines a contaminated site as a site at which substances occur at concentrations:

1. above background levels and pose, or are likely to pose, an immediate or long-term hazard to human health or the environment; or
2. exceed levels specified in policies and regulations.

### **Environment**

The Canadian Environmental Assessment Act defines environment as the components of the Earth including

- (a) land, water and air, including all layers of the atmosphere,
- (b) all organic and inorganic matter and living organisms, and
- (c) the interacting natural systems that include components referred to in paragraphs (a) and (b).

### **Environment Assessment**

The Canadian Environmental Assessment Act defines environmental assessment as respective of a project, an assessment of the environmental effects of the project that is conducted in accordance with this Act and the regulations.

### ***First Nations Land Management Act (FNLMA)***

Federal Act that came into effect June 17, 1999. This Act sets out the requirements and processes necessary for First Nations to become independent of the *Indian Act* with respect to reserve lands. Under this Act, First Nations receive authority over reserve lands, natural resources and revenues generated on reserve.

### **First Nations Framework Agreement on Land Management (Framework Agreement)**



Precursor to the *FNLMA* originally signed by the Federal Government and 13 First Nations. The Framework Agreement sets out the guidelines for the creation and adoption of a land code that First Nations wanting to come under the *FNLMA* must follow.

### ***Indian Act***

Statute enacted by the Parliament of Canada pursuant to subsection 91 (24) of the *Constitution Act, 1867* (formerly known as the *British North America Act*) which authorizes the making of laws in relation to Indians, and lands reserved for Status Indians.

### **Land Code**

The fundamental laws of land use that set out the principles and administrative structures that apply to Band Land and determine how the Band will exercise authority over those lands. The MLIB Land Code was ratified Jan 29, 2003 and verified Feb 27, 2003.

### **Land Management Committee**

An elected Committee whose function is to advise Council and Band staff on all matters pertaining to Band reserve lands and their management. This committee works with the Land Advisory Board and oversees the management of reserve lands. It also oversees communication between the Band Administration and Band Members on land use issues.

### **Land Use Designation**

Types of recommendations contained in the Land Use Plan. The MLIB Land Use plan contains four different categories for designated Land Use. These four designations are defined on page 30 of the MLIB Land Use Plan.

### **Land Use Plan**

A document that states the land use and future development wishes of the community. The MLIB Land Use Plan takes into account the principles and mission statement of the Land Code and is intended to be used as a tool to assist the LMC determine and guide future development on Reserve lands.

### **Land Use Planning**

The process of making decisions regarding appropriate uses for land and determining which uses are compatible, so that land can be used in a sustainable manner to satisfy multiple needs.

### **Lands Advisory Board (LAB)**

Included as community support under the Framework Agreement of the *FNLMA*. This board works with communities to ensure they have adequate resources to develop their land code and advises communities with respect to land management regulations, environmental assessment policies and reporting requirements.

### **MLIB**



McLeod Lake Indian Band.

### **Reserve Lands**

A parcel of land that is set aside for the use and benefit of a Band. The federal Crown holds the legal title to Reserve Lands. MLIB has 31 parcels of Reserve Lands that add up to a total of 18,764.8 ha. These Reserve Lands are defined under the Treaty 8 Adhesion and Settlement Agreement.

### **Resource Development Area (RDA)**

Specific land use designation used in the MLIB Land Use Plan. Under this plan, resource development such as forestry, mining, hydroelectric and oil and gas are given priority in areas designated for Resource Development by the plan.

### **Sustainable Development**

The *Canadian Environmental Assessment Act* defines sustainable development as development that meets the needs of the present, without compromising the ability of future generations to meet their own needs.



## **APPENDIX 2 – SURVEY RESULTS**